Annual Examination | MATHEMATICS | 2019-20

Section - A

Multiple Choice Questions (MCQ'S)

Q.1 Choose the correct answer for each from the given options.

1. An angle with measure less than 90° is called ___________.
   (a) Acute angle (b) Right angle (c) Obtuse angle (d) None of these
2. A triangle having two sides congruent is called a / an ___________.
   (a) Isosceles triangle (b) Scalene triangle
   (c) Equilateral triangle (d) None of these
3. The sub duplicate of 4:9 is ___________.
   (a) 2 : 3 (b) 16 : 81 (c) 8 : 18 (d) 6 : 4
4. A circle which passes through three vertices of a triangle is called ___________.
   (a) Escribed circle (b) Circum circle
   (c) Inscribed circle (d) None of these
5. $\tan 60^\circ =$ ___________
   (a) $\sqrt{3}$ (b) 1 (c) $\frac{1}{\sqrt{3}}$ (d) $\frac{2}{\sqrt{3}}$
6. The Cartesian product of set A and B written as ___________.
   (a) A . B (b) A x B (c) A Δ B (d) B x A
7. $(-3, -2)$ is in ___________ quadrant.
   (a) Second (b) Third (c) Fourth (d) First
8. $\log_2 x = 3$, then $x =$ ___________
   (a) 6 (b) 8 (c) 10 (d) 5
9. The degree of polynomial $x^2 + xy^2 + y$ is ___________.
   (a) 2 (b) 3 (c) 4 (d) 1
10. The natural logarithm has base ___________.
    (a) ^ (b) e (c) 10 (d) 0
11. The sum of 10 observations is 125, the mean is ___________.
    (a) 12.5 (b) 50 (c) 75 (d) – 15
12. Solution set of $\sqrt{y-2} = -4$ is ___________.
    (a) 18 (b) ± 4 (c) { } (d) ± 16
13. $\sec 30^\circ =$ ___________.
    (a) $\frac{2}{\sqrt{3}}$ (b) $\sqrt{2}$ (c) 2 (d) 1
14. In a right angled triangle the side opposite to right angle is called ___________.
    (a) Perpendicular (b) Hypotenuse (c) Altitude (d) None of these
15. The measure of an angle inscribed in a semi-circle is equal to ___________.
    (a) 90° (b) 180° (c) 120° (d) 360°
16. $(-x)^2(-x)^3(-x)^4 =$ ___________.
    (a) $-x^9$ (b) $-x^{24}$ (c) x^9 (d) x^{12}
17. If a : b = c : d then a : c = b : d this property of proportion is called ___________.
    (a) Dividendo (b) Alternado (c) Invertendo (d) Componendo
18. If $A = \begin{bmatrix} 5 & 6 \\ 3 & -1 \end{bmatrix}$, then $A^t =$ ___________.
    (a) $\begin{bmatrix} 5 & 3 \\ 6 & -1 \end{bmatrix}$ (b) $\begin{bmatrix} 6 & 3 \\ 5 & -1 \end{bmatrix}$ (c) $\begin{bmatrix} 6 & 5 \\ -1 & 3 \end{bmatrix}$ (d) $\begin{bmatrix} 6 & -1 \\ 3 & 5 \end{bmatrix}$
19. Multiplicative inverse of matrix A is written as ___________.
    (a) A^t (b) A^{-1} (c) $|A|$ (d) A
20. The L.C.M of $x^3 - y^3$ and $x^6 - y^6$ is ___________.
    (a) $x^3 - y^3$ (b) $x^3 + y^3$ (c) $x^6 + y^6$ (d) $x^6 - y^6$